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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
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10/630,001

07/29/2003

Winfried Teiwes

SMIN-00100

8546

7590
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03/17/2008

EXAMINER

STREGE, JOHN B

ART UNIT

PAPER NUMBER

2624

MAIL DATE

DELIVERY MODE

03/17/2008

PAPER

Please find below and/or attached an Office communication concerning this application or proceeding.

The time period for reply, if any, is set in the attached communication.

Office Action Summary	Application No. 10/630,001	Applicant(s) TEIWES ET AL.	
	Examiner JOHN B. STREGE	Art Unit 2624	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 16 January 2008.
- 2a) ☒ This action is **FINAL**. 2b) ☐ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1,3-6,8-13 and 18-21 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 1,3-6,8-13,18-21 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on _____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. _____.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- | | |
|--|---|
| 1) <input type="checkbox"/> Notice of References Cited (PTO-892) | 4) <input type="checkbox"/> Interview Summary (PTO-413) |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948) | Paper No(s)/Mail Date. _____ |
| 3) <input type="checkbox"/> Information Disclosure Statement(s) (PTO/SB/08) | 5) <input type="checkbox"/> Notice of Informal Patent Application |
| Paper No(s)/Mail Date _____ | 6) <input type="checkbox"/> Other: _____ |

Response to Amendment

1. The amendment submitted 1/16/08 has been entered in full.

Response to Arguments

2. Applicant's arguments filed 1/16/08 (also 10/18/07) have been fully considered but they are not persuasive. Specifically the applicant argues that Sklar does not disclose selective line readout. The Examiner respectfully disagrees. Specifically as discussed in the previous rejection Sklar discloses a high speed imaging device for the eye wherein the tracking/profilometer camera 53 is intended to cover a certain field of view of the patient's tissue, such as an eye or a portion of the eye (col. 15 lines 61-65). This is further seen in figure 2 where the cross sectional representations of the eye are shown and they include lines (such as 32 or 34) which allow the user to focus on that selected area including the line (col. 13 lines 45-50, the examiner interprets this to read on selective line readout). Thus Sklar effectively reads on the limitations of the claim language and the rejection is maintained.

DETAILED ACTION

Claim Rejections - 35 USC § 102

3. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

4. Claim 1,3-6,8-11, and 18-21 are rejected under 35 U.S.C. 102(b) as being anticipated by Sklar et al. USPN 5,098,426 (hereinafter "Sklar").

Regarding claim 1, Sklar discloses a system for determining the orientation of the eye (col. 3 lines 15-23) consisting of the following sub-systems: an x, y high-speed eye tracking system, for measuring the very fast translation or saccadic motion of the eye, relative to an ophthalmic surgical, diagnostic or treatment device or instrument (53a of figure 3, col. 15 lines 52-55); a second position measurement system for measuring slower eye movements, such as multiple dimensions of eye position and/or position of eye parts, relative to an ophthalmic surgical, diagnostic or treatment device or instrument (53b of figure 3, col. 15 lines 49-52); and a system for combining the measurements of the two previous systems for obtaining a multiple dimensional model of the eye position that is more accurate than the model obtainable from either system individually (53 of figure 3, col. 15 lines 36-55) wherein the x,y eye tracking system is a single high speed imaging device using of selective line readout (Sklar discloses a high speed imaging device for the eye wherein the tracking/profilometer camera 53 is intended to cover a certain field of view of the patient's tissue, such as an eye or a portion of the eye (col. 15 lines 61-65). This is further seen in figure 2 where the cross sectional representations of the eye are shown and they include lines (such as 32 or 34) which allow the user to focus on that selected area including the line (col. 13 lines 45-50, the examiner interprets this to read on selective line readout).

Regarding claim 4, Sklar discloses obtaining 3 dimensions of eye position (col. 8 lines 17-35).

Regarding claim 5, Sklar discloses that the tracking camera substantially excludes specularly reflecting light by cross polarization (paragraph bridging cols. 9-10)

which reads on a structured illumination and according filtering means to improve visibility of a unique combination of trackable features.

Claim 6 is similarly analyzed to claim 1.

Regarding claim 8, Sklar discloses obtaining 3 dimensions of eye position thus discloses measuring depth (col. 8 lines 17-35).

Claim 9 is similarly analyzed to claim 5.

Regarding claim 10, Sklar discloses a means for making a reference measurement of three or more points on the eye, in three dimensions; a means for measuring these same reference points at a subsequent time in three dimensions; and a means for determining the position of the eye from the change in position at these multiple points (col. 10 lines 25-52).

Claim 11 is similarly analyzed to claim 10.

Regarding claims 18-19, Sklar discloses that the invention is used for laser refractive surgery (see at least the abstract).

Regarding claims 20-21, as discussed Sklar discloses selective line readout by picking up the lines which are selected by the user (such as 32 or 34 of figure 2).

Claim Rejections - 35 USC § 103

5. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

6. Claims 12-13 are rejected under 35 U.S.C. 103(a) as being unpatentable over Sklar in view of Yamada et al. USPN 5,311,879 (hereinafter "Yamada").

Regarding claim 12, as discussed above Sklar discloses all of the limitations of claim 1 including a means for tracking the translational eye position. Sklar does not explicitly disclose a means for tracking the translational head position and a means for determining the rotation of the eye from the variation of the difference between head position and eye position. Sklar also recites that his system can be used for medical diagnosis (col. 12 lines 3-10).

Yamada discloses a means for tracking translational eye position, a means for tracking the translational head position; and a means for determining the rotation of the eye from the variation of difference between the head and eye position (col. 3 lines 19-41). This allows for a medical diagnosis of the individual.

Sklar and Yamada are analogous art because they are from the same field of endeavor of medical diagnosis.

At the time of the invention it would have been obvious to one of ordinary skill in the art to combine Sklar and Yamada to use the information of the head to determine information about eye movement. The motivation for doing so would be that it is valuable in certain types of medical diagnosis. Thus it would have been obvious to one of ordinary skill in the art to combine Sklar and Yamada to obtain the invention of claim 12.

Claim 13 is similarly analyzed to claim 12.

Conclusion

7. **THIS ACTION IS MADE FINAL.** Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire THREE MONTHS from the mailing date of this action. In the event a first reply is filed within TWO MONTHS of the mailing date of this final action and the advisory action is not mailed until after the end of the THREE-MONTH shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than SIX MONTHS from the mailing date of this final action.

Contact Information

Any inquiry concerning this communication or earlier communications from the examiner should be directed to JOHN B. STREGE whose telephone number is (571)272-7457. The examiner can normally be reached on Monday-Friday between the hours of 8-5.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Bhavesh Mehta can be reached on (571) 272-7453. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Art Unit: 2624

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

/Bhavesh M Mehta/
Supervisory Patent Examiner,
Art Unit 2624

JS